

PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1. (Currently Amended) An apparatus for registering a mobile node operating in a visited network, comprising:
  - a memory element; and
  - a processor configured to execute a set of instructions stored within the memory element, the set of instructions for:
    - performing an initial registration with a foreign agent in the visited network;
    - if an IP packet is transferred within a predetermined time period, then following a standard protocol;
    - if an IP packet is [[note]] not transferred within the predetermined time period, then refraining from performing a re-registration with the foreign agent, wherein refraining from performing the re-registration is contrary to the standard protocol; and
    - if an IP packet is transferred after the predetermined time period expires and before [[the]] a registration lifetime expires, then transmitting a re-registration request.
2. (Original) An apparatus for re-registering a mobile node with a foreign agent, comprising:
  - a memory element; and
  - a processor configured to execute a set of instructions stored within the memory element, the set of instructions for:
    - performing a registration with the foreign agent wherein a registration lifetime is set;
    - refraining from performing a re-registration if a pre-determined period, which is less than the registration lifetime, has expired and no packet has been transmitted or received at the mobile node; and

performing a re-registration only if a packet is transmitted or received after a successful registration and before the expiration of the registration lifetime

3. (Currently Amended) An apparatus for registering a mobile node operating in a visited network, comprising:

registration means for performing an initial registration and subsequent re-registrations of the mobile node with a foreign agent in the visited network; [[and]]

a first timing means set to a first time variable for use with the registration means, wherein the registration means uses the timing means to determine whether to follow a standard protocol or to disregard the standard protocol, wherein disregarding the standard protocol is to refrain from performing the re-registration of the mobile node; and

a second timing means set to a second time variable, wherein the second timing means expires when an IP session is over and wherein the first time variable is smaller than the second time variable when the IP session is maintained.

4. (Original) A method for re-registering a mobile node with a foreign agent, comprising:  
performing an initial registration with a foreign agent in the visited network;

if an IP packet is transferred between the mobile node and the foreign agent within a predetermined time period, then following a standard protocol;

if an IP packet is not transferred within the predetermined time period, then refraining from performing a re-registration with the foreign agent, wherein refraining from performing the re-registration is contrary to the standard protocol; and

if an IP packet is transferred after the predetermined time period and before the expiration of a registration lifetime, then transmitting a re-registration request.

5. (Original) A method for minimizing the impact of registration requests from a travelling mobile node, comprising:

performing initial registration with the foreign agent wherein a lifetime is set;

refraining from performing a re-registration if a pre-determined period, which is less than the registration lifetime, has expired and no packet has been transmitted or received; and

performing a re-registration only if a packet is transmitted or received after the expiration of the pre-determined period and before the expiration of the registration lifetime.